Hazardous Waste Incinerator Trial Burn Plan Evaluation

Applicant Pratt & Whitney Aircraft Location E. Hartford, CT

				Comment Number
POHC(s)				
1.	Has selection of POHC(s) been approved by WMD?	Yes ___	No X	___
2.	Has (have) POHC(s) been adequately identified?			
	a. chemical composition description adequate.	Yes ___	No X	___
	b. heating value.	Yes ___	No X	___
	c. viscosity.	Yes ___	No X	___
	d. concentration.	Yes ___	No X	___
Incinerator Description				
1.	Manufacturer's name and model number.	Yes X	No ___	___
2.	Type of incinerator.	Yes X	No ___	___
3.	Description of operation.	Yes X	No ___	___
4.	Procedures for;			
	a. start-up,	Yes ___	No X	1
	b. shut-down,	Yes ___	No X	1
	c. emergency shut-down.	Yes ___	No X	1
5.	Linear dimensions including cross sectional area of combustion chamber.	Yes X	No ___	___
6.	Description of auxiliary fuel system (type/feed).	Yes X	No ___	___
7.	Description and capacity of prime mover.	Yes X	No ___	___
8.	Description of automatic waste feed cut-off system(s).	Yes X	No ___	___
9.	Nozzle and burner design.	Yes X	No ___	___
10.	Material(s) of construction.	Yes X	No ___	___

			Comment Number
11. Location and description of devices for measuring;			
a. temperature,	Yes X	No	
b. pressure,	Yes X	No	
c. feed rate(s),	Yes X	No	
d. combustion gas velocity,	Yes	No X	
e. carbon monoxide,	Yes X	No	2
f. diagram indication location of above.	Yes	No X	

Pollution Control Equipment

1. Manufacturer's name(s) and model number(s).	Yes	No X	3
2. Type of control device(s) and description of operation.	Yes X	No	
3. Linear dimensions including cross section of stack.	Yes X	No	
4. Material(s) of construction.	Yes X	No	
5. Location and description of devices for measuring;			
a. temperature,	Yes X	No	
b. pressure differential,	Yes	No X	4
c. scrubbing medium injection rate,	Yes	No X	
d. scrubbing medium injection pressure,	Yes	No X	
e. scrubbing medium pH,	Yes	No X	5
f. diagram indicating location of above.	Yes	No X	

Sampling Procedures

1. Particulate			
a. detailed sampling procedures.	Adequate	Inadequate X	6
b. detailed QA procedures.	Adequate	Inadequate X	6
2. HCL			
a. detailed sampling procedures.	Adequate	Inadequate X	6
b. detailed QA procedures.	Adequate	Inadequate X	6

3. POHC DRE				Comment Number
a. detailed sampling procedures.	Adequate ____	Inadequate X		7
b. detailed QA procedures.	Adequate ____	Inadequate X		7
4. Scrubbing medium				
a. detailed sampling procedures.	Adequate ____	Inadequate X		8
b. detailed QA procedures.	Adequate ____	Inadequate X		8
5. Ash residues				
a. detailed sampling procedures.	Adequate ____	Inadequate X		8
b. detailed QA procedures.	Adequate ____	Inadequate X		8
6. Waste Feed				
a. detailed sampling procedures.	Adequate X	Inadequate ____		____
b. detailed QA procedures.	Adequate ____	Inadequate X		9

Analysis Procedures

1. Particulate			
a. detailed analytical procedures.	Adequate ____	Inadequate X	6
b. detailed QA procedures.	Adequate ____	Inadequate X	6
2. HCL			
a. detailed analytical procedures.	Adequate ____	Inadequate X	6
b. detailed QA procedures.	Adequate ____	Inadequate X	6
3. POHC DRE			
a. detailed analytical procedures.	Adequate ____	Inadequate X	7
b. detailed QA procedures.	Adequate ____	Inadequate X	7
4. Scrubbing medium			
a. detailed analytical procedures.	Adequate ____	Inadequate X	8
b. detailed QA procedures.	Adequate ____	Inadequate X	8

				Comment Number
5. Ash residues				
a. detailed analytical procedures.	Adequate ____	Inadequate X		8
b. detailed QA procedures.	Adequate ____	Inadequate X		8
6. Waste Feed				
a. detailed analytical procedures.	Adequate ____	Inadequate X		10
b. detailed QA procedures.	Adequate ____	Inadequate X		10

Anticipated Incinerator and Control Equipment Operation Conditions (for each POHC)

1. Feed description.	Yes ____	No X	11
2. Feed rate.	Yes X	No ____	
3. Auxiliary fuel feed rate.	Yes ____	No X	
4. Incineration temperature range.	Yes X	No ____	
5. Scrubber parameters.	Yes ____	No X	12
6. Carbon monoxide emissions.	Yes X	No ____	
7. Combustion gas velocity.	Yes X	No ____	

Hazardous Waste Incinerator Trial Burn
Plan Evaluation - Comments

Comment Number	
1	Some of this information is contained in the submittal, although not specifically required by the regulation. I feel that it would be beneficial to have P&W submit an incinerator/emissions control system operations and maintenance manual which would contain a detailed description of procedures (including operational parameter ranges) the operator must follow for: a. start-up (cold), b. shut-down, c. emergency shut-down, d. automatic shut-down, e. re-starting (warm), f. normal operations. The manual should also include a plan for conducting "normal" maintenance procedures and periodic maintenance inspections of both systems (including monitoring devices). Changes to the manual should be reported to EPA/CT DEP. Operating records, maintenance records, and inspection records should be retained by P&W for a minimum of two years and should be made available at the request of EPA/CT DEP.
2.	P&W has provided very little inforamtion concerning their CO CEM system. This system must successfuly complete a performance specificaiton test (PST) prior to the conduct of the trial burn. P&W should contact ESD for details of pretest report, pretest conference, and PST procedural requirements. A separate O&M manual for this system is desirable.
3.	Model numbers not mentioned.
4.	Pressure differential is measured across the Venturi but apparently not across the packed tower/demister. All require continuous measurement.
5.	A more detailed explanation of the serfilco pH controller/monitor is desirable.
6.	P&W has indicated that the proper procedures will be used; however, a detailed testing protocol (pretest report) must be submitted for review. P&W should contact ESD for details concerning pretest report requirements. Also, a pretest conference will be required at least 10 days in advance of the test date. The conference should be held at P&W and should be attended by appropriate personnel from P&W, P&W's testing contractor, EPA and CT DEP.

Hazardous Waste Incinerator Trial Burn
Plan Evaluation - Comments

Comment Number	
7.	P&W has made no mention of POHC testing. A detailed sampling and analysis plan must be submitted for review. (ESD can supply information concerning POHC sampling and analysis using the VOST method.) However, the POHC(s) should be chosen prior to submittal of this plan.
8.	A detailed sampling and analysis plan must be submitted.
9.	P&W has made no mention of sample handling/chain-of-custody procedures to be used.
10.	A detailed analysis plan must be submitted.
11.	POHC(s) not yet chosen.
12.	See Pollution Control Equipment items 5.a) - 5.e) and comments 4 and 5.

ROUTING AND TRANSMITTAL SLIP

Date 8/29

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Bill Torrey		
2. Waste Mgt. Division		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Here's a decent copy of P&W checklist

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
John Carlson, ESD	Phone No.

5041-102

☆ U.S.G.P.O.: 1979-281-184/19

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